

Title (en)

SELF-ALIGNING ELECTRICAL CONNECTOR SYSTEM

Title (de)

SELBSTAUSRICHTENDES ELEKTRISCHES VERBINDERSYSTEM

Title (fr)

ENSEMBLE CONNECTEUR ÉLECTRIQUE À ALIGNEMENT AUTOMATIQUE

Publication

EP 4179598 A1 20230517 (DE)

Application

EP 21740474 A 20210702

Priority

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Abstract (en)

[origin: WO2022012977A1] The invention relates to a self-aligning electrical connector system for data and/or energy transmission, comprising a first connector part having multiple low-load contact elements and/or high-load contact elements, comprising a second connector part which can be joined to the first connector part and which has low-load contact elements and/or high-load contact elements that are complementary to the low-load contact elements and/or high-load contact elements of the first connector part, wherein the first connector part has multiple positioning pins which are designed to engage in positioning chambers of the second connector part in order to achieve a rough positioning of the two connector parts relative to one another, and comprising a level support frame on which the first connector part is floatingly arranged with three rotational and at least two translational degrees of freedom, wherein the first connector part has multiple flat elements on its underside which protrude laterally in opposing directions and are loaded with a spring force by spring arms formed on the support frame in the direction of the support frame, and wherein the first connector part has a ball cup between the flat elements, which supports a ball that is in contact with the support frame.

IPC 8 full level

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